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(54) Title: **METHODS AND COMPOSITIONS FOR TREATING CANCER**

(57) Abstract: Pharmaceutical compositions, kits and methods useful for the treatment of cancer include a composition containing a modified metallothionein (MT) amino acid sequence or fragment thereof that binds the megalin receptor less avidly than naturally-occurring metallothionein. The modified metallothionein can be in a conjugate with multiple molecules of a therapeutic divalent metal ion. Embodiments of the modified metallothionein complex can have a negative or neutral charge or a size greater than 70kD. Such compositions are useful also in methods for treating heavy metal poisoning and inhibiting renal uptake of therapeutic divalent metal ions.

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